

LINDY®

CONNECTION PERFECTION

Mini NAS Enclosure SATA & IDE

User Manual

English



LINDY No. 42808

www.lindy.com



Introduction

Thank you for purchasing the LINDY Mini NAS Enclosure. This enclosure has been designed to add extra storage to your Mac Mini and your network, whilst complimenting the design of your Mac Mini. The small footprint design allows it to be seated underneath a Mac Mini, but with its Network and USB 2.0 interface, it can also be used with other suitably equipped Macs and PCs.

Features

- For use with standard 3.5" SATA/IDE hard disks
- USB 2.0 and RJ-45 interface
- USB 2.0 interface is backwards compatible with USB 1.1 equipped computers
- Connectors: 1 x USB 2.0 Type B Female; 1 x RJ-45 Female 10/100Mbps
- Supports DHCP server, Samba server with hosting for 64 online clients
- FTP server support for up to 5 FTP users at the same time
- Password management provides secure access to the HDD and web management
- Aluminium cover for heat dispersal
- Low-noise internal fan
- Stylish blue power LED

There are 4 different setup options:

- **As a DHCP Client:**
If your NAS Enclosure operates under a built-in DHCP server router (e.g. Internet Sharing Hub), it will obtain an IP address from the DHCP server automatically
- **As a DHCP Server:**
If your operating environment does not support a DHCP server, the NAS Enclosure will immediately act as a DHCP server and assign an IP address for installation
- **In a Static IP environment:**
If your operating environment supports static IP addresses you will need to configure the IP address for the NAS Enclosure to operate in a static IP environment.
- **USB 2.0 Mode:**
Simply connect the USB 2.0 cable from the NAS enclosure to your PC and turn on the power; the NAS Enclosure will simply become an external USB Hard Disk

Package Contents

- Mini NAS Enclosure
- Installation screws
- 2 foam feet
- 12V DC Power Adapter
- 1m, USB 2.0 cable
- 1m, Ethernet cable
- LINDY User Manual
- CD-ROM

Hardware Assembly

Before starting the assembly make sure the jumper(s) on your hard drive are set to the Master setting. Consult your hard disk manual or the manufacturer's website for the correct jumper setting.

1. Ensure that the NAS Enclosure is disconnected from the mains, before removing the 4 screws from the bottom of the case

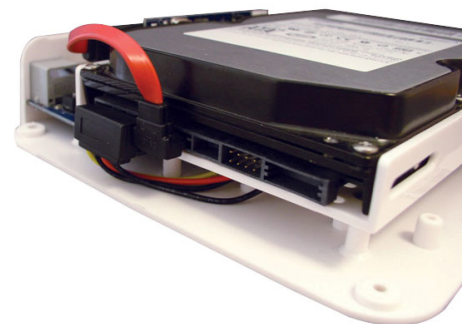


2. Remove the upper case



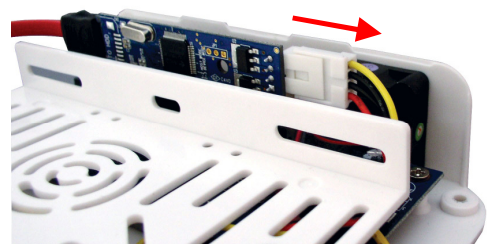
3. If you are using a SATA hard drive continue to Step 4, if you are using an IDE hard drive please skip to Step 5.

4. Connect the SATA Data and SATA Power cables to the relevant connector on your hard drive and continue to Step 12

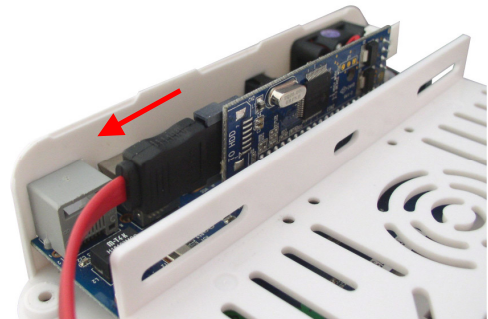


5. Before you can connect your IDE hard drive you must first remove the SATA Bridge Board and Molex to SATA power cable.

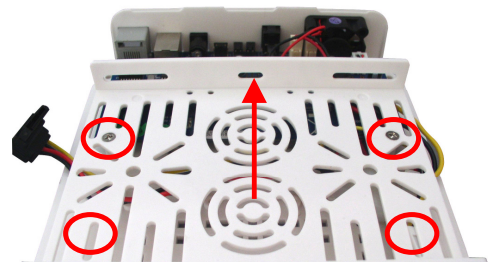
6. Carefully disconnect the 4 pin power connector, by holding the base of the drive enclosure and pulling the connector away from the bridgeboard.



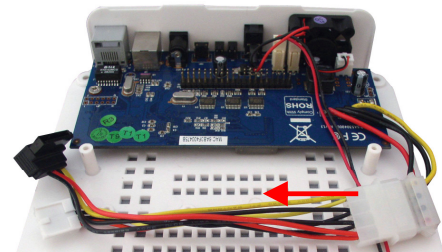
7. Disconnect the SATA Data cable from the bridgeboard. Hold the base of the drive enclosure and pull the bridgeboard up to disconnect it.



8. Unscrew the four screws holding the drive tray in place and remove the drive tray.



9. Disconnect the Molex to SATA cable and then replace the drive tray and insert the screws.



10. Attach the provided IDE ribbon cable and to the main board, in place of the bridge board.



11. Place the hard drive into the drive tray and connect the Molex power and IDE data cables



12. Use the supplied screws to secure both sides of the drive



13. Carefully assemble the top and bottom of the case. If the upper case does not fit properly, adjust the hard disk position and try again



14. Replace the 4 case screws and affix the two foam feet as illustrated



15. Connect the Power Cable to the NAS Enclosure and the mains power supply. Now connect the Ethernet cable to the NAS Enclosure and your PC using the RJ45 ports

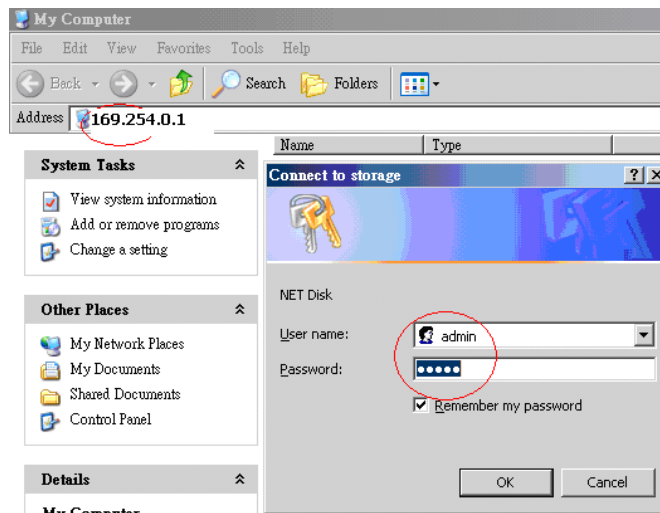
If you are intending to use the NAS Enclosure using a direct connection to your Mac Mini or PC then use the USB cable to connect the Enclosure



Configuring the NAS Enclosure

1. Peer to peer configuration (Direct connection to a PC or Mac)

Connect the NAS Enclosure to the LAN port of your PC or Mac using an Ethernet cable. Open your web browser and key in the IP address 169.254.0.1 Type “admin” for both the user name and password.

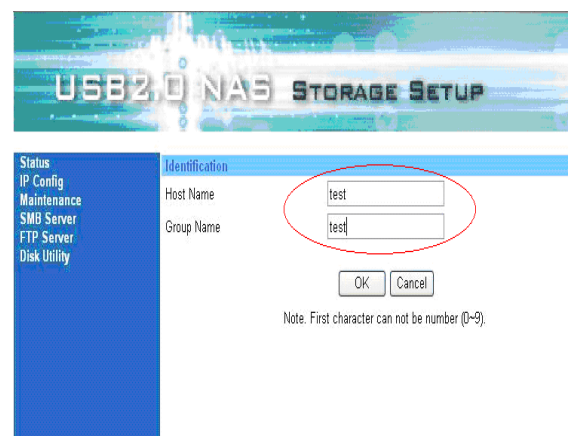


Please Note:

If your HDD is an unformatted new drive, you need to format the drive first to FAT32 format. Please refer to Page 14/15 “Using the enclosure with your Mac/PC”

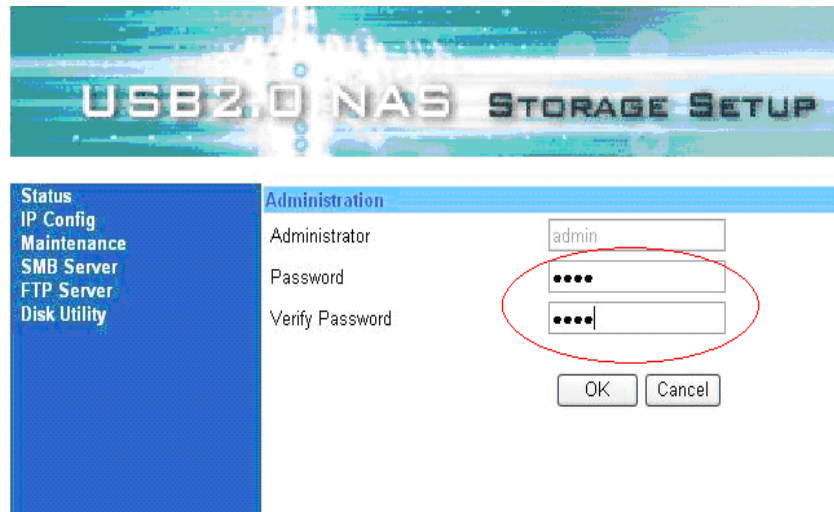
2. Identification

Under the Identification heading click “**Change**” to modify your Host & Group names, the default setting is STORAGE-XXXX (the last four digits are the MAC Address). Enter your desired “**Host name**” and “**Group Name**” Click “**OK**” to modify.



3. Password Change

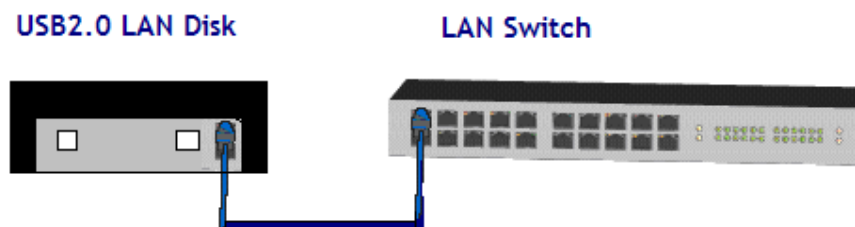
In the Administration mode, you can choose your own password for entering the setup mode. Now you are ready to connect the NAS Enclosure to your Network.

**Please Note:**

After changing the password you will be logged off and then be prompted to log in using your new password.

4. Connect the NAS Enclosure Via Ethernet.

Connect an Ethernet cable to the Ethernet port of your NAS Enclosure. Connect the other end of the Ethernet cable to your Network Router. Switch on your NAS Enclosure; it may take a few second for your network to recognise the NAS Enclosure.

**Important Information:**

Make sure that the computer you will be using to configure the NAS Enclosure is on the same network (or same subnet) as the NAS Enclosure.

5. How to find the NAS Enclosure through IP Finder software.

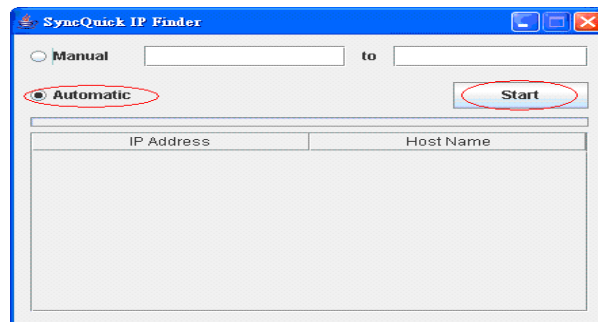
Before you install the IP finder software, your computer must have “Java Runtime Environment” TM installed. If you do not already have the Java Runtime Environment installed on your PC or Mac you can download it for free from the following website:

http://www.java.com/en/download/windows_ie.jsp

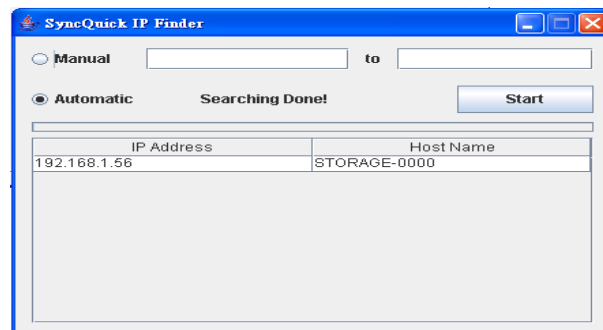
Insert the USB 2.0 LAN Disk CD included with your purchase in to your PC's CD-Rom Drive. Double click on the IP Finder software icon.



Select **Automatic** (recommended) and then click **Start** to search all devices within same IP Allocation.

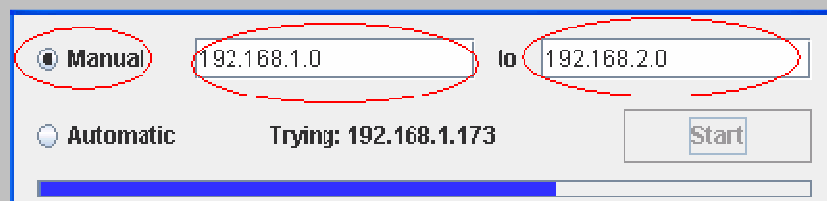


For example the NAS Enclosure IP address is 192.168.1.56



Troubleshooting:

If the IP finder software is unable to find the NAS Enclosure it means that your NAS Enclosure and your computer are using different IP allocations. In this case please select **Manual** Mode and key in the IP allocation range you wish to search.



Double Click the host name to enter the NAS Enclosure Set Up page, and enter your password (default password is **admin**).

6. How to Map the NAS Enclosure

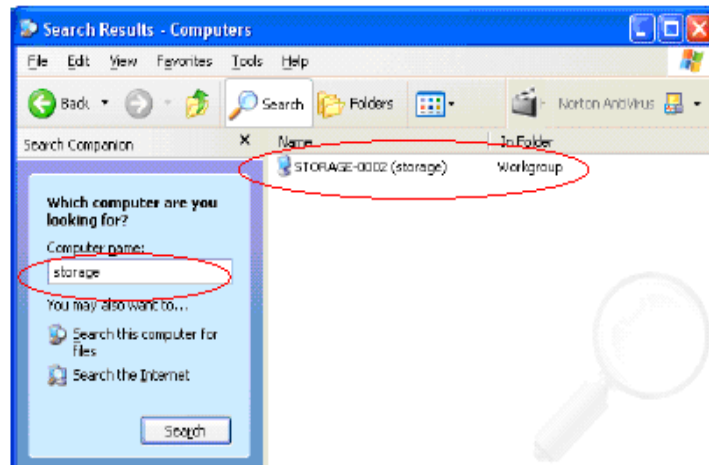
Click **Start** on your Windows desktop

Click **Search**

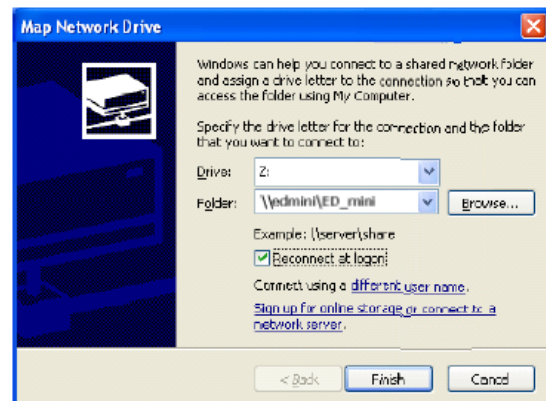
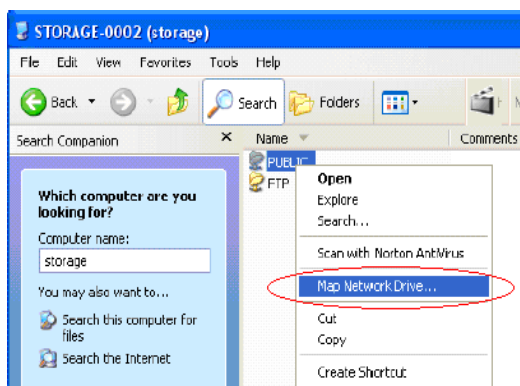
Select **Computer or people**

Select **A computer on the network** and a new window will appear.

Key the host name (For example “storage-xxxx” or the name which you defined in section 2) in the Computer Name box and then press the **Search** button. The following window will appear



Point to the NAS Enclosure (in this case “Storage-xxxx”) and double click the left mouse button. Choose the folder you want to map, right click your mouse and select **Map Network Drive**.



Complete the appropriate information and select **Finish**. This creates a direct access to the shared drive from My Computer (for more information about drive mapping, refer to your Windows manual).

7. Date and Time set up

On the Set Up page under **Administration** click **Change** next to **Date/Time** and you will see the page below. You can set and change the Date/Time/SNTP/Time Server and Time Zone information. Click **OK** to save the set up.

The screenshot shows the 'Date and Time' configuration page of a USB2.0 NAS. The page has a blue sidebar on the left with menu items: Status, IP Config, Maintenance, SMB Server, FTP Server, and Disk Utility. The main content area is titled 'Date and Time' and contains the following fields:

- Date:** 2005 / 09 / 15 (format: yyyy/mm/dd)
- Time:** 18 : 19 : 22 (format: hh:mm:ss)
- SNTP:** Radio buttons for 'Auto' (selected) and 'Disable'.
- Time Server:** A dropdown menu showing 'clock.isc.org' (note: 'now is clock.isc.org').
- Time Zone:** A dropdown menu showing '(GMT+08:00)Beijing, Hong Kong, Singapore, Taipei'.

At the bottom of the configuration area are 'OK' and 'Cancel' buttons. The 'OK' button is circled in red.

8. DHCP Server Configuration

On the Set Up page under the **IP Configuration** heading you can choose to enable or disable the DHCP functionality of the NAS Enclosure.

Enable mode: The NAS Enclosure will become a DHCP server on your network.

Disable Mode: When the NAS Enclosure detects that another DHCP server exists on your network, the DHCP function will automatically disabled.

The screenshot shows the 'IP Configuration' page. It displays the IP address '169.254.0.1'. Below the IP address, there are radio buttons for 'On', 'Enable' (selected and circled in red), and 'Disable'. An 'Apply' button is located to the right of the radio buttons. The page also has a blue sidebar with menu items: IP Configuration, Disk Info & Firmware, and a partially visible 'Disk Info & Firmware' item.

Once you have selected a DHCP setting click **Apply** to save your changes.

9. Disk info & Firmware

On the Set Up page under the **Disk Info & Firmware** heading you can view your Hard Disk and product firmware information.

Disk Info & Firmware	
Firmware Ver.	NAS-BASIC28
Disk ID	[master] HDS722580V\LAT20 V320A60A
Free Size	29481 MB free
Total Size	78533 MB

Firmware version: Shows the NAS Enclosure's current Firmware version

Disk Info: Shows the model details of the installed HDD

Free Size: Shows the available free space of the HDD

Total Size: Shows the total capacity of the HDD

10. Language Setting

On the Set Up page under the **Language Setting** heading you can select the language you wish to use then click **Submit** to save the settings. The selection shows different languages for folders in SMB & FTP server but will not change the language of the setup pages. (To avoid language issues, it is recommended that folder names use English characters in SMB & FTP server.

The screenshot shows the 'Language' dropdown menu with the following options: English, Central Europe(cp1250), Cyrillic(cp1251), Latin I(cp1252), Greek(cp1253), Turkish(cp1254), Hebrew(cp1255), Arabic(cp1256), Baltic(cp1257), Vietnam(cp1258), Thai(cp874), Japanese Shift-JIS(cp932) (highlighted), Simple Chinese, Traditional Chinese(cp950), and Japanese Shift-JIS(cp932). The 'Submit' button is circled in red.

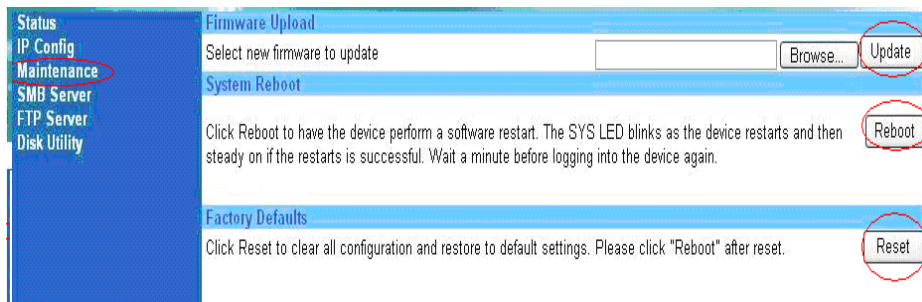
11. IP Configuration setup page

On the Set Up page select **IP Config** to view the page below. There is the option to either select Automatic IP (Recommended) address or setup static IP address manually. Once you have made your selection click **Apply** to save your changes.

The screenshot shows the 'IP Config' page with the following fields: IP (169.254.0.1), SubnetMask (255.255.0.0), Gateway (169.254.0.1), Primary DNS (169.254.0.1), and Secondary DNS (0.0.0.0). The 'Automatic IP' radio button is selected, and the 'Apply' button is circled in red.

12. Maintenance setup page

On the Set Up page select **Maintenance** to view the page below.



Firmware Upload: When new firmware becomes available it can be downloaded and stored on your PC. To install new firmware click **Browse** and navigate to the location that you saved the firmware to. Select the firmware and then click **Update**.

System Reboot: After a new firmware update please click **Reboot** to complete the upgrade.

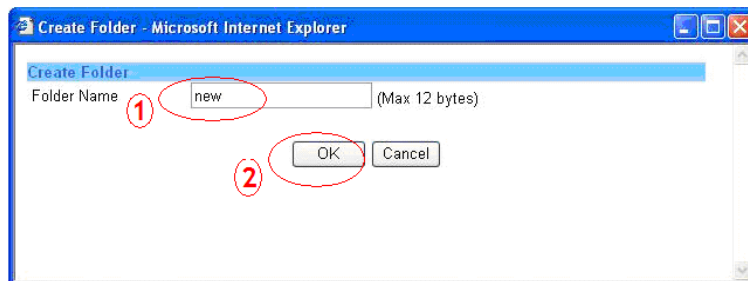
Factory Default: Choose the **Reset** button to return to factory default information, all your previous settings will be deleted. Alternatively you may press the Reset button on the rear of the NAS Enclosure for 20 seconds.

13. SMB Server setup page

The SMB server function allows users to share data or files through your Network.

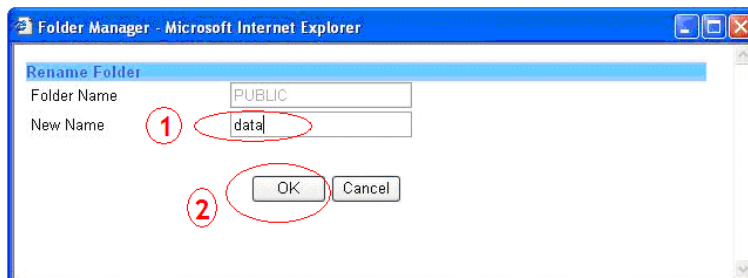
13.1 Creating a new folder

Click on the **Create** button and type a new folder name. Then click **OK**.



13.2 Changing the folder name

Click **Rename** to change the folder name, enter a new name and then click **OK**.

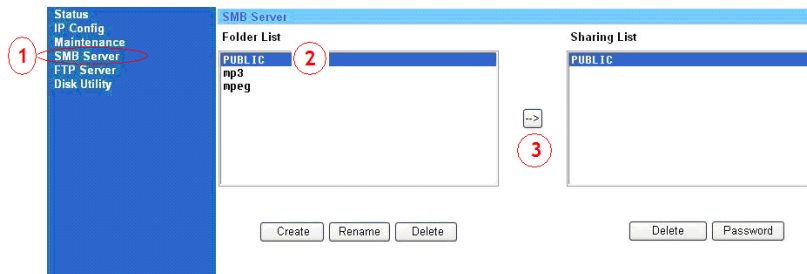


13.3 Adding folders to the Sharing list

Select SMB Server.

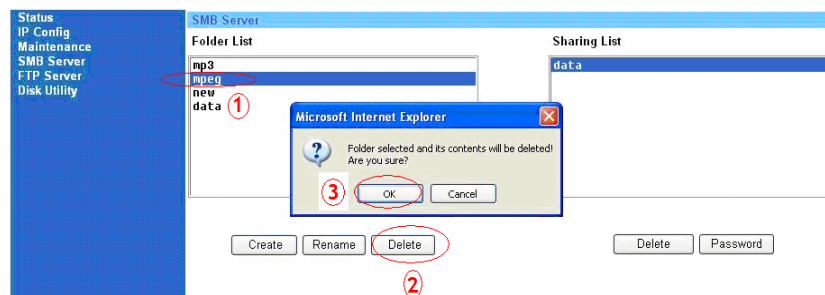
Select the folder you wish to share.

Click on the (- ->) button to add the folder to the Sharing List.



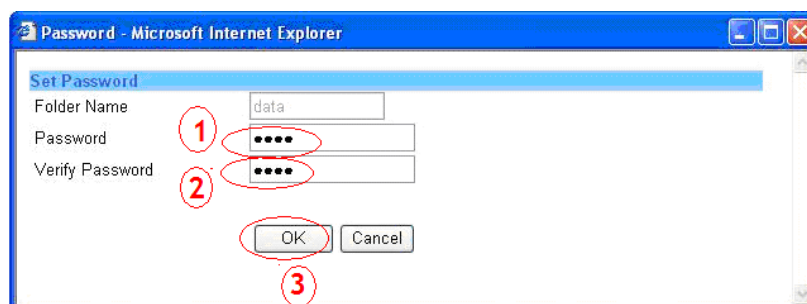
13.4 Deleting folders from Folder List/Sharing List

Highlight the folder name you wish delete on either the Folder List or the Sharing List, click the **Delete** button and then click **OK** when prompted.



13.5 Adding a password to a shared folder

Highlight the folder name you wish to add password protection to and click the **Password** button. Type in a password and then verify it, then Click **OK**. Now your folder is password protected.



Please Note:

To avoid language support problems, it is recommended that your shared folders only use English characters

14. FTP Server setup page

14.1 How to setup an FTP server

FTP Status: Enable (Recommended)

Port: Auto detected by NAS Enclosure

Allow anonymous: Disable (Recommended)

FTP Configuration

FTP Status: **Enable** (dropdown menu showing Enable and Disable)

Port: 21

Allow anonymous?: ☐ Enable ☒ **Disable**

Read only: Allow other users to read data only

Read/write: Allow other users to read/write data

14.2 Adding an account name to the FTP Server

Press the **Add** button to add an FTP user account. Enter a new account name and then click **OK** to save.

FTP Add User - Microsoft Internet Explorer

FTP Add Account

Account Name: ken

Buttons: OK, Cancel

Main Interface Buttons: Add, Modify, Delete, En/Disable

14.3 Modify/Add Password's for an FTP user account

Press the **Modify** button, type in a password then highlight the folder name you wish to share. Next click the (- ->) button and the folder name will be added to sharing list. Finally click **Apply** to your save settings.

Modify FTP Account

Account: ken

Password:

Access: ☐ Read only ☒ Read/Write

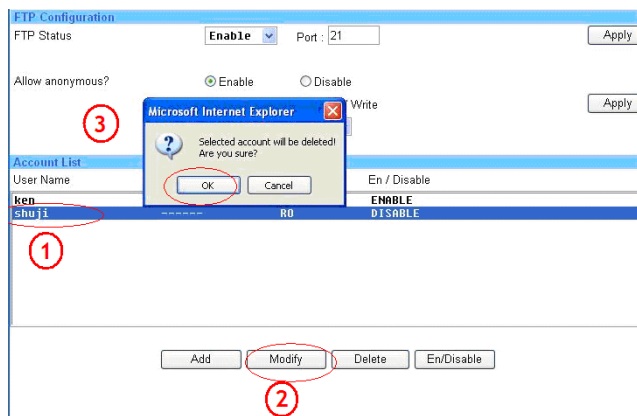
Folder List: mp3, new, data

Sharing List:

Buttons: Create, Rename, Delete, Add (- ->), Delete, Back, Apply

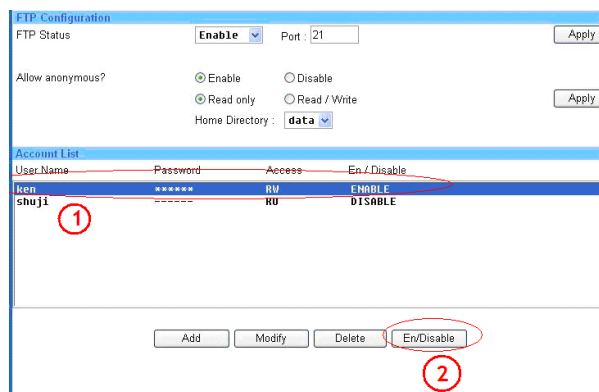
14.4 Deleting an FTP user account

Highlight the FTP User's account you wish to delete and click the **Delete** button then click **OK** to confirm.



14.5 Enable/Disable an FTP user account

Highlight the FTP User's account you wish to disable and click the **“En/disable”** button. The status will show in the FTP Configuration screen.



Using the enclosure with your Mac

Mac Mini users: This enclosure is designed to sit underneath your Mac Mini.

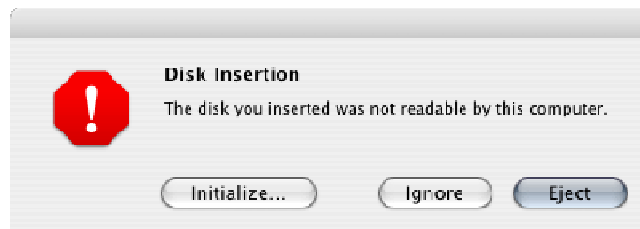
If you want to use this enclosure with both PCs and Macs, then you should use a FAT32 formatted hard drive. If you are using a brand new drive, or want to erase an older drive you will need to follow the instructions below:

CAUTION!

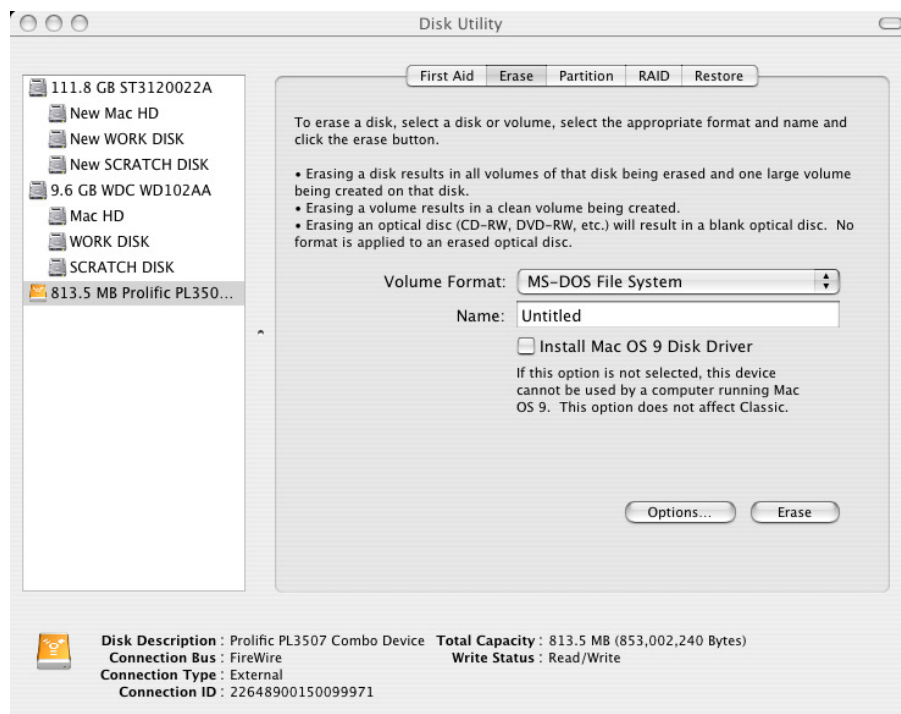
Formatting the hard drive will destroy all the data on the drive. Make sure you have made a backup of any files you do not want to erase, before proceeding!

After first booting up your computer and then connecting and powering up the enclosure, the drive will mount and show up on your desktop, if it is a pre-formatted drive. No further action is required.

However, if the drive is new and unformatted, you will see the following window appear:



1. Select **Initialize** to continue.
2. The **Disk Utility** application will launch:



3. Make sure the external drive is highlighted in the left hand pane and select the **Erase** tab.
4. Select your preferred **Volume Format** type from the drop-down menu. If you are using the drive with both Macs and PCs you should use **MS-DOS File System**. You can give the drive a name in the **Name** box.
5. Click the **Erase** button. A confirmation window will appear, click **Erase** again.

When the erase process is complete, the drive icon (as outlined) will appear on the desktop:



Dismounting the drive

NOTE!

To avoid losing data or damaging the drive, you should never turn off or unplug the external drive housing without dismounting the drive first!

To safely remove the drive with your Mac powered on, you should drag the drive icon to the trash. You can then unplug the housing's power and data cables if you want to disconnect the drive.

Using the enclosure with your PC

If you want to use this enclosure with both PCs and Macs, then you should use a FAT32 formatted hard drive. If you are using a brand new drive, or want to erase an older drive you will need to follow the instructions below:

CAUTION!

Formatting the hard drive will destroy all the data on the drive. Make sure you have made a backup of any files you do not want to erase before proceeding!

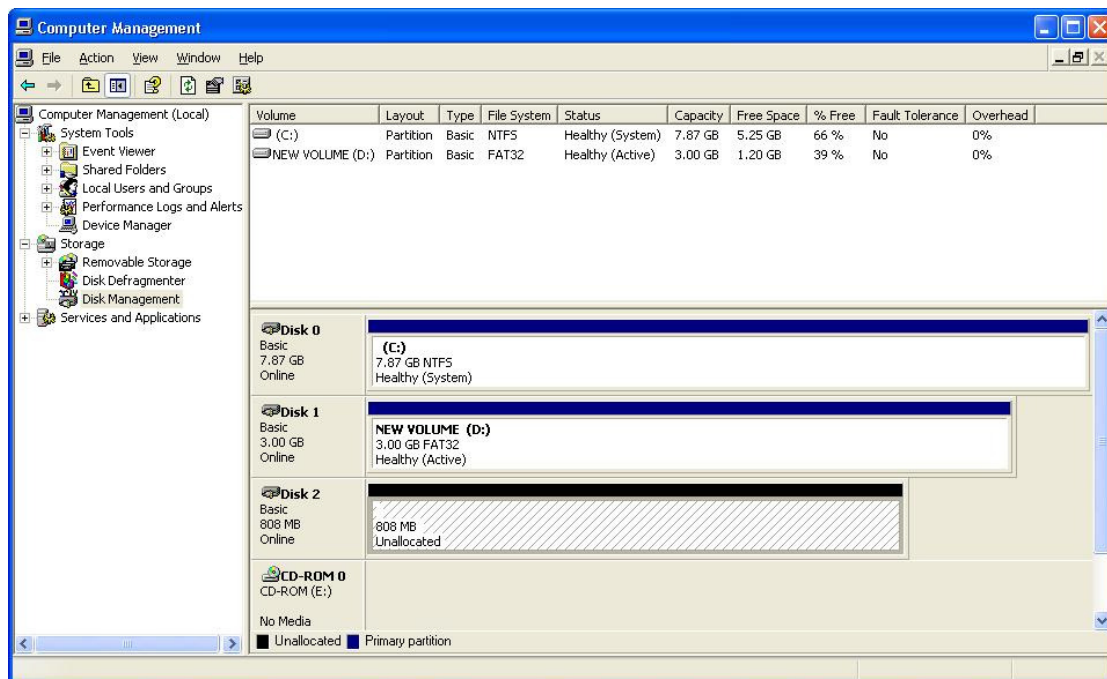
Windows 2000/XP users

After first booting up your computer and connecting and powering up the enclosure, Windows will detect the drive and automatically install the relevant driver software.

If it is a pre-formatted drive, no further action is required; a new drive icon will show up in Windows Explorer.

If you are using a brand new, unformatted drive, you will need to format the drive before use:

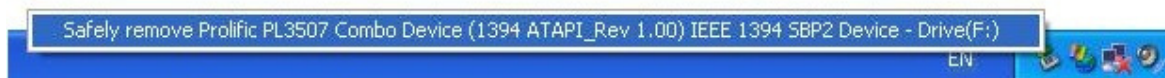
1. Right-click the **My Computer** icon on your desktop and from the drop-down menu, select **Manage**
2. The Computer Management window will appear. Select **Disk Management** from the left hand pane
3. In the right hand pane, the new drive will be identified as 'Unallocated'. Right-click the drive and, from the drop-down menu, select **New Partition**



4. The **New Partition Wizard** will appear. Follow the on-screen instructions to format and partition the drive. Once complete, the new drive icon will show up in Windows Explorer and the drive will be accessible

Safely Removing the Drive

To safely remove the drive from your system, click the “Safe Removal” icon on the Windows taskbar. A dialogue box will appear:



Click on the box to safely remove the drive. Once the safe removal has been confirmed, you can power down the enclosure and unplug it from your PC:



Windows Me users

After first booting up your computer and connecting and powering up the enclosure, Windows will detect the drive and automatically install the relevant driver software.

If it is a pre-formatted drive, no further action is required; a new drive icon will show up in Windows Explorer.

If you are using a brand new, unformatted drive, you will need to partition and format the drive for use. To do this you need to run **FDisk**.

For instructions about using FDisk on a Windows Me PC, please visit the support section of the Microsoft website.

Q: Why can't I access to the NAS Enclosure setup page?

A: Please connect the NAS Enclosure directly to your computer via Ethernet/LAN port. Open your web browser and key in the default IP address **169.254.0.1**. Then type **admin** for both Account name and password to enter the NAS Enclosure setup page.

Q: Why can't I create/share folders in SMB or FTP server?

A: To avoid languages support issue, you are suggested to create/share folders with English characters only.

Q: Why can't I upload files via LAN connection or the NAS Enclosure disconnects?

A1: Please make sure the networking is connected properly and you have the access right (read & write) for the folders.

A2: Please make sure you have enough bandwidth for uploading large files (It is suggested to upload large files via USB 2.0 port connection). A complicated network environment such as large workgroups or too many layers of network can result in NAS Enclosure disconnection.

Q: How do I reset the NAS Enclosure?

A1: By hardware: Press and hold the reset button for 20 seconds and the NAS Enclosure will reset to the default settings.

A2: By software: Enter the NAS Enclosure setup page, select Maintenance/Factory defaults and click on **Reset** button. After seeing the message indicating the reset is completed, click the **Reboot** button to complete the process.

Q: How do I setup the NAS Enclosure to use Daylight saving time?

A: The NAS Enclosure does not support Daylight saving time setting.

Q: How can I reduce the noise of the NAS Enclosure??

A: Make sure the hard drive/case/fan are properly screwed together without interference. Ensure that the foot stickers have been attached to the base of the NAS Enclosure, to reduce vibration.

Q: Why can't I partition my whole hard drive in FAT32 format?

A: Due to the FAT32 format limit, Windows OS can format it up to 30G only. We suggest you use Disk/Utility of NAS Enclosure to format the whole hard drive size in a single partition.

Q: Why can't Windows XP enter a SMB folder with password protection via the NAS Enclosure?

A: Please update Windows XP to SP2 or above. If you have installed Norton Internet Security please check with Norton service centre.

Q: What is the NAS Enclosure default login name and password?

A: The NAS Enclosure's defaults are; Login name: admin, default password: admin.

Q: What are the limitations of users on NAS ENCLOSURE for FTP and Samba modes?

A1: FTP 8 User / Samba 8 User (Total 24 sessions at the same time).

A2: FTP Server: Account (maximum 32 user accounts, 8 user accounts can connect at the same time, a maximum 16 folders share by any one account).

A3: Samba Server: Share Level Access (maximum 16 folder share by root)

Q: How do I access the NAS ENCLOSURE via the Internet?

A: If your NAS Enclosure is connected to a network using a public IP, you will need to request a Static IP Address for public access from your service provider. Once you have received this please perform the following steps:

1. Log in to the web interface for the NAS Enclosure, and go to the FTP Server page to enable FTP Status.

2. Create a User account and include levels of authority.
3. Assign the NAS Enclosure the static IP Address supplied by your ISP, using the instructions from Section 11 of this guide.
4. Open Microsoft Internet Explorer or any other FTP software, and enter ftp:// and then the IP Address used in step 3 in the address field. E.g.: ftp://192.176.54.24

Q: What types of hard disks are compatible to work with the NAS ENCLOSURE?

A1: Hard disks have to support Ultra DAM compatible with Ultra 33, 66, 100, 133.

A2: Support LBA frame, up to the maximum IDE format 2TB(2,048GB).

A3: The File format has to be FAT32, with single files having a 4GB maximum limit. If you insert a hard disk which is already formatted to FAT16 or NTFS, you will need to format it again according to the NAS ENCLOSURE internal format function.

A4: The NAS ENCLOSURE supports hard disks with only one partition.

Q: Does the NAS ENCLOSURE support Hard disk Power Management?

A: The NAS ENCLOSURE uses standby mode for power management (Sleep time) if there is no activity during a specified range (user defined: 5-60 minutes). To set this feature up log in to the web interface of the NAS Enclosure and select **Disk Utility > Set Sleep Time function** choose 0 to disable function or from the range 5-60 minutes to enable the function.

CE/FCC Information

CE Statement

This device complies with the European Regulations for Electromagnetic Compatibility (EMC) of the European Union and it is equipped with the CE mark. This unit has to be used with high quality shielded connection cables. Only if these high quality shielded cables are used it can be sure that the EMC compatibility is not adversely influenced.

FCC Statement

Shielded cables must be used with this equipment to maintain compliance with radio frequency energy emission regulations and ensure a suitably high level of immunity to electromagnetic disturbances.

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Recycling Information



WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24. März 2006 an das Entsorgen von entsprechenden, auch alten, Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique.

Chaque Etat membre de l' Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate.

Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico.

Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

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